

What is claimed is:

1. In a PDA having capability to transmit and receive data in a communications network, the improvement comprising:

a video system integral with said PDA for receiving and transmitting video images, and for viewing said video images, said video system comprising;

5 a camera module housing an image sensor therein, said image sensor lying in a first plane and including an array of pixels for receiving images thereon, said image sensor further including circuitry means on said first plane and coupled to said array of pixels for timing and control of said array of pixels, said image sensor producing a pre-video signal, a first circuit board mounted in said camera module and electrically coupled to said image sensor, said first circuit board including circuitry means for converting said pre-video signal to a desired video format, said camera module further including a transceiver radio element mounted therein and electrically communicating with said first circuit board to transmit the converted pre-video signal;

10 a transceiver radio module mounted in said PDA for wirelessly communicating with said transceiver element in said camera module to receive said converted pre-video signal;

15 a video view screen attached to said PDA for viewing said video images, said video view screen communicating with said transceiver radio module for displaying video images processed by said first circuit board.

2. A device, as claimed in claim 1, wherein:

said image sensor defines a profile area in said first plane, and said first circuit board is positioned in longitudinal alignment with said image sensor such that said first circuit board does not extend substantially beyond said profile.

3. A device, as claimed in claim 1, further including:
a second circuit board electrically coupled with said first circuit board and said image sensor for further processing said pre-video signal, said second board being placed adjacent said first circuit board within said camera module.

4. A device, as claimed in claim 1, wherein:
said first and second planes are offset from and substantially parallel to one another.

5. A device, as claimed in claim 3, wherein:
said second circuit board lies in a third plane which is offset from and extends substantially parallel to said first and second planes.

6. A device, as claimed in claim 3, wherein:
said second circuit board includes means for digital signal processing enabling the pre-video signal conditioned by said first circuit board to be viewed by said video view screen.

7. A device, as claimed in claim 1, wherein:
said first circuit board converts said pre-video signal to a post-video signal for direct reception by a remote video device, said post-video signal being of a format selected from the group consisting of a NTSC/PAL video signal and a VGA video signal.

8. A device, as claimed in claim 1, wherein:
said pixels are CMOS pixels.

9. A device, as claimed in claim 1, wherein:

said transceiver radio element and said transceiver radio module communicate by a bluetooth communications standard.

10. A device, as claimed in claim 1, wherein:

said transceiver radio module and said transceiver radio element communicate by an IEEE 802.15.13 communications standard.

11. A device, as claimed in claim 1, wherein:

said array of pixels includes an array of passive CMOS pixels, wherein individual passive CMOS pixels of said array of passive CMOS pixels each include a photo diode for producing photoelectrically generated signals, and an access transistor communicating with said photo diode to control the release of photoelectrically generated signals.

12. A device, as claimed in claim 1, wherein:

individual pixels within said array of pixels each include an amplifier.

13. A device, as claimed in claim 1, wherein:

said PDA includes a text screen mounted therein for viewing text which is manipulated by a user.

14. A device as claimed in claim 1, further including:

a wireless telephone attached to said PDA.

15. A device, as claimed in claim 1, further including:

a remote video device electrically coupled to said video system for further viewing said video images.

16. A device, as claimed in claim 15, wherein:

said remote video device is selected from the group consisting of a television and a computer monitor.

17. A device, as claimed in claim 1 wherein:

said PDA further includes a camera battery charge circuit mounted therein for recharging said camera module, said camera module having an integral source of power which electrically communicates with said charge circuit when said camera module is mounted in said PDA.

18. In a PDA having capability to transmit and receive data in a communications network, the improvement comprising:

a video system integral with said PDA for receiving and transmitting video images, and for viewing said video images, said video system comprising;

a camera module housing an image sensor therein, said image sensor lying in a first plane and including an array of pixels for receiving images thereon, said image sensor further including circuitry means on said first plane and coupled to said array of pixels for timing and control of said array of pixels, said image sensor producing a pre-video signal, said camera module further including a transceiver radio element mounted therein and electrically communicating with said circuitry means to transmit the pre-video signal to the PDA;

a transceiver radio module mounted in said PDA for wirelessly communicating with said transceiver element in said camera module to receive said pre-video signal;

15 a first circuit board mounted in said PDA and electrically communicating with said transceiver radio module for converting said pre-video signal into a desired video format;

20 a video view screen attached to said PDA for viewing said video images, said video view screen communicating with said first circuit board for displaying video images processed by said first circuit board.

19. A device, as claimed in claim 18, wherein:
said pixels are CMOS pixels.

20. A device, as claimed in claim 18, wherein:
said transceiver radio element and said transceiver radio module communicate by a bluetooth communications standard.

21. A device, as claimed in claim 18, wherein:
said transceiver radio module and said transceiver radio element communicate by an IEEE 802.15.13 communications standard.

22. In a PDA having capability to transmit and receive data in a communications network, the PDA having a housing, and a video view screen for viewing the data which includes video signals, the improvement comprising:

5 a camera module for taking video images, said camera module communicating with circuitry within said PDA enabling viewing on said video view screen and enabling

video signals to be transmitted from said camera module to said computer, said camera module including an image sensor housed therein, said image sensor lying in a first plane and including an array of pixels for receiving images thereon, said image sensor further including circuitry means on said first plane and coupled to said array of said pixels for timing and control of said array of pixels, said image sensor producing a pre-video signal, a first circuit board electrically connected to said image sensor, said first circuit board including circuitry means for converting said pre-video signal to a desired video format;

a transceiver radio element housed within said camera module and electrically coupled to said first circuit board for transmitting said converted pre-video signal; and

a transceiver radio module housed in the PDA and wirelessly communicating with said transceiver radio element for receiving said converted pre-video signal, and said transceiver radio element being electrically coupled to the video view screen of the PDA enabling viewing of the converted pre-video signals.

23. A device, as claimed in claim 22, wherein:
said pixels are CMOS pixels.

24. A device, as claimed in claim 22, wherein:
said transceiver radio element and said transceiver radio module communicate by a bluetooth communications standard.

25. A device, as claimed in claim 22, wherein:
said transceiver radio module and said transceiver radio element communicate by an IEEE 802.15.13 communications standard.

26. A device, as claimed in claim 22 wherein:

5 said PDA further includes a camera battery charge circuit mounted therein for recharging said camera module, said camera module having an integral source of power which electrically communicates with said charge circuit when said camera module is mounted in said PDA.

27. In a PDA having capability to transmit data between a computer connected to a global communications network, the PDA having a housing, and a video view screen for viewing the data which includes video signals, the improvement comprising:

5 a camera module for taking video images, said camera module communicating with circuitry within said PDA enabling viewing on said video view screen and enabling video signals to be transmitted from said camera module to said computer, said camera module including an image sensor housed therein, said image sensor lying in a first plane and including an array of pixels for receiving images thereon, said image sensor further
10 including circuitry means on said first plane and coupled to said array of said pixels for timing and control of said array of pixels, said image sensor producing a pre-video signal;

 a transceiver radio element housed within said camera module and electrically coupled to said image sensor for transmitting said pre-video signal;

15 a transceiver radio module housed in the PDA and wirelessly communicating with said transceiver radio element for receiving said pre-video signal; and

 a first circuit board housed within the PDA and electrically coupled to said transceiver radio module for taking said pre video signal and conditioning it to be a post video signal in a desired format, and said transceiver radio element being electrically

20 coupled to the video view screen of the PDA enabling viewing of the converted pre-video signals.

28. A device, as claimed in claim 27, wherein:
said pixels are CMOS pixels.

29. A device, as claimed in claim 27, wherein:
said transceiver radio element and said transceiver radio module communicate by a bluetooth communications standard.

30. A device, as claimed in claim 27, wherein:
said transceiver radio module and said transceiver radio element communicate by an IEEE 802.15.13 communications standard.

31. A device, as claimed in claim 27 wherein:
said PDA further includes a camera battery charge circuit mounted therein for recharging said camera module, said camera module having an integral source of power which electrically communicates with said charge circuit when said camera module is
5 mounted in said PDA.

32. A PDA having capability to transmit and receive data in a communications network, said PDA comprising:

an image sensor lying in a first plane, and an array of pixels for receiving images thereon, said image sensor further including circuitry means on said first plane and
5 coupled to said array of pixels for timing and control of said array of pixels, said image sensor producing a pre-video signal;

a first circuit board electrically communicating with said image sensor, said first circuit board including circuitry means for converting said pre-video signal to a desired video format;

10 a camera module housing said image sensor and said first circuit board;
 a transceiver radio element mounted in said camera module communicating with said first circuit board for wirelessly transmitting the converted pre-video signal;

 a transceiver radio module communicating wirelessly with said transceiver radio element for receiving the converted pre-video signal;

15 a transceiver/amplifier section electrically coupled to said transceiver radio module for amplifying and further transmitting the converted pre-video signal, and for receiving, and amplifying video and audio signals transmitted by another party;

 a digital signal processor electrically coupled to said transceiver radio module and said transceiver/amplifier section, said digital signal processor further conditioning said converted pre-video signal, and also for conditioning video and audio signals received by
20 said transceiver/amplifier section from the other party;

 a microphone electrically communicating with said digital signal processor for recording sound and converting the sound to audio signals;

 a speaker electrically communicating with said digital signal processor for
25 broadcasting the audio signals;

 a video view screen attached to said PDA, said video view screen for selectively displaying images from said imaging device, and for selectively displaying video images received by said transceiver/amplifier section from the other party;

 a video switch communicating with said first circuit board and said digital signal
30 processor for switching video images to be viewed on said video view screen; and

 a PDA power supply mounted in said PDA for providing power thereto.

33. A device, as claimed in claim 32, wherein:
said pixels are CMOS pixels.

34. A device, as claimed in claim 32, wherein:
said transceiver radio element and said transceiver radio module communicate by
a bluetooth communications standard.

35. A device, as claimed in claim 32, wherein:
said transceiver radio module and said transceiver radio element communicate by
an IEEE 802.15.13 communications standard.

36. A device, as claimed in claim 32 wherein:
said PDA further includes a camera battery charge circuit mounted therein for
recharging said camera module, and said camera module further includes a camera
module source of power mounted in said camera module which electrically
communicates with said charge circuit when said camera module is mounted in said
PDA.

37. A PDA having capability to transmit and receive data in a
communications network, said PDA comprising:

an image sensor lying in a first plane, and an array of pixels for receiving images
thereon, said image sensor further including circuitry means on said first plane and
coupled to said array of pixels for timing and control of said array of pixels, said image
sensor producing a pre-video signal;
a camera module housing said image sensor;

a transceiver radio element mounted in said camera module communicating with said image sensor for wirelessly transmitting the pre-video signal;

10 a transceiver radio module communicating wirelessly with said transceiver radio element for receiving the pre-video signal;

 a first circuit board electrically communicating with said transceiver radio module, said first circuit board including circuitry means for converting said pre-video signal to a desired video format;

15 a transceiver/amplifier section electrically coupled to said transceiver radio module for amplifying and further transmitting the converted pre-video signal, and for receiving, and amplifying video and audio signals transmitted by another party;

 a digital signal processor electrically coupled to said transceiver radio module and said transceiver/amplifier section, said digital signal processor further conditioning said
20 converted pre-video signal, and also for conditioning video and audio signals received by said transceiver/amplifier section from the other party;

 a microphone electrically communicating with said digital signal processor for recording sound and converting the sound to audio signals;

 a speaker electrically communicating with said digital signal processor for
25 broadcasting the audio signals;

 a video view screen attached to said PDA, said video view screen for selectively displaying images from said imaging device, and for selectively displaying video images received by said transceiver/amplifier section from the other party;

 a video switch communicating with said first circuit board and said digital signal
30 processor for switching video images to be viewed on said video view screen; and

 a PDA power supply mounted in said PDA for providing power thereto.

38. A device, as claimed in claim 37, wherein:
said pixels are CMOS pixels.

39. A device, as claimed in claim 37, wherein:
said transceiver radio element and said transceiver radio module communicate by
a bluetooth communications standard.

40. A device, as claimed in claim 37, wherein:
said transceiver radio module and said transceiver radio element communicate by
an IEEE 802.15.13 communications standard.

41. A device, as claimed in claim 37 wherein:
said PDA further includes a camera battery charge circuit mounted therein for
recharging said camera module, and said camera module further includes a camera
module source of power mounted in said camera module which electrically
5 communicates with said charge circuit when said camera module is mounted in said
PDA.

42. In a PDA having capability to transmit and receive data in a
communications network, the improvement comprising:
a video system integral with said PDA for receiving and transmitting video
images, and for viewing said images, said video system comprising:
5 a camera module housing an image sensor therein, said image sensor lying
in a first plane and including an array of pixels for receiving images thereon, said image
sensor producing a pre-video signal, a first circuit board lying in a second plane and
electrically coupled to said image sensor, said first circuit board including circuitry means

for timing and control of said array of pixels and circuitry means for processing and
 10 converting said pre-video signal to a desired video format, a transceiver radio element
 communicating with said first circuit board for transmitting said converted pre-video
 signal;

a transceiver radio module mounted in said PDA for wirelessly receiving
 said converted pre-video signal; and

15 a video view screen attached to said PDA for viewing said video images,
 said video view screen communicating with said transceiver radio module, and displaying
 video images processed by said first circuit board.

43. A device, as claimed in claim 42, wherein:
 said pixels are CMOS pixels.

44. A device, as claimed in claim 42, wherein:
 said transceiver radio element and said transceiver radio module communicate by
 a bluetooth communications standard.

45. A device, as claimed in claim 42, wherein:
 said transceiver radio module and said transceiver radio element communicate by
 an IEEE 802.15.13 communications standard.

46. In a PDA having capability to transmit and receive data in a
 communications network, the improvement comprising:

a video system integral with said PDA for receiving and transmitting video
 images, and for viewing said images, said video system comprising:

5 a camera module housing an image sensor therein, said image sensor including an array of pixels for receiving images thereon, said image sensor producing a pre-video signal, a transceiver radio element communicating with said image sensor for transmitting said pre-video signal;

10 a transceiver radio module mounted in said PDA for wirelessly receiving said pre-video signal;

 a first circuit board electrically coupled to said transceiver radio module, said first circuit board including circuitry means for timing and control of said array of pixels and circuitry means for processing and converting said pre-video signal to a desired video format, and

15 a video view screen attached to said PDA for viewing said video images, said video view screen communicating with said transceiver radio module, and displaying video images processed by said first circuit board.

47. A device, as claimed in claim 46, wherein:
said pixels are CMOS pixels.

48. A device, as claimed in claim 46, wherein:
said transceiver radio element and said transceiver radio module communicate by a bluetooth communications standard.

49. A device, as claimed in claim 46, wherein:
said transceiver radio module and said transceiver radio element communicate by an IEEE 802.15.13 communications standard.

50. In a PDA having capability to transmit and receive data in a communications network, the PDA including a video view screen for viewing video images, the improvement comprising:

5 a camera module for taking video images, said camera module wirelessly communicating with circuitry within said PDA enabling viewing on said video view screen and enabling video signals to be transmitted from said camera module to the personal computer, said camera module including an image sensor housed therein, said image sensor lying in a first plane and including an array of pixels for receiving images thereon, said image sensor producing a pre-video signal, a first circuit board lying in a 10 second plane and electrically connected to said image sensor, said first circuit board including circuitry means for timing and control of said array of pixels and circuitry means for processing and converting said pre-video signal to a desired video format, and a transceiver radio element housed in the camera module for wirelessly transmitting the converted pre-video signal to the PDA.

51. A device, as claimed in claim 50, wherein:
said pixels are CMOS pixels.

52. A device, as claimed in claim 50, wherein:
said transceiver radio element communicates with the PDA by a bluetooth communications standard.

53. A device, as claimed in claim 50, wherein:
said transceiver radio element communicates with the PDA by an IEEE 802.15.13 communications standard.

54. In a PDA having capability to transmit and receive data in a communications network, the PDA including a video view screen for viewing video images, the improvement comprising:

5 a camera module for taking video images, said camera module wirelessly communicating with circuitry within said PDA enabling viewing on said video view screen and enabling video signals to be transmitted from said camera module to the personal computer, said camera module including an image sensor housed therein, said image sensor including an array of pixels for receiving images thereon, said image sensor producing a pre-video signal, and a transceiver radio element housed in the camera
10 module for wirelessly transmitting the pre-video signal to the PDA.

55. A device, as claimed in claim 54, wherein:
said pixels are CMOS pixels.

56. A device, as claimed in claim 54, wherein:
said transceiver radio element communicates with the PDA by a bluetooth communications standard.

57. A device, as claimed in claim 54, wherein:
said transceiver radio element communicates with the PDA by an IEEE 802.15.13 communications standard.

58. In a PDA having capability to transmit and receive data in a communications network, the PDA including a video view screen for viewing the video images, the improvement comprising:

5 a camera module for taking video images, said camera module communicating
with circuitry within said PDA enabling viewing of said video images on said PDA and
enabling video signals to be transmitted from said camera module to the personal
computer, said camera module including an image sensor housed therein, said image
sensor lying in a first plane and including an array of pixels for receiving images thereon,
said image sensor further including circuitry means electrically coupled to said array of
10 said pixels for timing and control of said array of pixels, said circuitry means for timing
and control placed remote from said array of pixels on a second plane, said image sensor
producing a pre-video signal, a first circuit board electrically connected to said image
sensor and lying in a third plane, said first circuit board including circuitry means for
processing and converting said pre-video signal to a desired video format, and a radio
15 transceiver element communicating with said first circuit board for wirelessly
transmitting said converted pre-video signal.

59. A device, as claimed in claim 58, wherein:
said pixels are CMOS pixels.

60. A device, as claimed in claim 58, wherein:
said transceiver radio element communicates with the PDA by a bluetooth
communications standard.

61. A device, as claimed in claim 58, wherein:
said transceiver radio element communicates with the PDA by an IEEE
802.15.13 communications standard.

62. In a PDA having capability to transmit and receive data in a communications network, the PDA including a video view screen for viewing the video images, the improvement comprising:

5 a camera module for taking video images, said camera module communicating with circuitry within said PDA enabling viewing of said video images on said PDA and enabling video signals to be transmitted from said camera module to the personal computer, said camera module including an image sensor housed therein, said image sensor lying in a first plane and including an array of pixels for receiving images thereon, said image sensor further including circuitry means electrically coupled to said array of
10 said pixels for timing and control of said array of pixels, said circuitry means for timing and control placed remote from said array of pixels on a second plane, said image sensor producing a pre-video signal, and a radio transceiver element communicating with said image sensor for wirelessly transmitting said pre-video signal.

63. A device, as claimed in claim 62, wherein:
said pixels are CMOS pixels.

64. A device, as claimed in claim 62, wherein:
said transceiver radio element communicates with the PDA by a bluetooth communications standard.

65. A device, as claimed in claim 62, wherein:
said transceiver radio element communicates with the PDA by an IEEE
802.15.13 communications standard.

66. A PDA having capability to transmit and receive data in a communications network, said PDA comprising:

an image sensor lying in a first plane including an array of pixels for receiving images thereon, said image sensor producing a pre-video signal;

5 a first circuit board electrically communicating with said image sensor, said first circuit board including circuitry means for timing and control of said array of pixels and circuitry means for processing and converting said pre-video signal to a desired video format;

10 a radio transceiver element communicating with said first circuit board for wirelessly transmitting said converted pre-video signal;

a camera module housing said image sensor, said first circuit board, and said transceiver radio element therein;

a radio transceiver module housed within the PDA for wirelessly communicating with said radio transceiver element and receiving said converted pre-video signal;

15 a transceiver/amplifier section electrically coupled to said transceiver radio module for amplifying and further transmitting the converted pre-video signal, and for receiving, and amplifying video and audio signals transmitted by another party;

20 a digital signal processor electrically coupled to said transceiver radio module and said transceiver/amplifier section, said digital signal processor further conditioning said pre-video signal which is first conditioned by said first circuit board, and also for conditioning video and audio signals received by said transceiver/amplifier section from the other party;

a microphone electrically communicating with said digital signal processor for receiving sound and converting the sound to audio signals;

25 a speaker electrically communicating with said digital signal processor for broadcasting audio signals;

a video view screen attached to said PDA, said video view screen for selectively displaying images from said imaging device, and for selectively displaying video images received by said transceiver/amplifier section; and

30 a video switch communicating with said first circuit board and said digital signal processor for switching video images to be viewed on said video view screen; and
a power supply mounted to said PDA for providing power thereto.

67. A device, as claimed in claim 66, wherein:
said pixels are CMOS pixels.

68. A device, as claimed in claim 66, wherein:
said transceiver radio element and said transceiver radio module communicate by
a bluetooth communications standard.

69. A device, as claimed in claim 66, wherein:
said transceiver radio module and said transceiver radio element communicate by
an IEEE 802.15.13 communications standard.

70. A PDA having capability to transmit and receive data in a
communications network, said PDA comprising:

an image sensor lying in a first plane including an array of pixels for receiving
images thereon, said image sensor producing a pre-video signal;

5 a first circuit board electrically communicating with said image sensor, said first
circuit board including circuitry means for timing and control of said array of pixels;
a radio transceiver element communicating with said first circuit board for wirelessly
transmitting said pre-video signal;

a camera module housing said image sensor, said first circuit board, and said
10 transceiver radio element therein;

a radio transceiver module housed within the PDA for wirelessly communicating
with said radio transceiver element and receiving said pre-video signal;

a second circuit board electronically communicating with said radio transceiver
module, said second circuit board including circuitry means for converting said pre-video
15 signal to a desired video format;

a transceiver/amplifier section electrically coupled to said transceiver radio
module for amplifying and further transmitting the converted pre-video signal, and for
receiving, and amplifying video and audio signals transmitted by another party;

a digital signal processor electrically coupled to said transceiver radio module and
said transceiver/amplifier section, said digital signal processor further conditioning said
20 pre-video signal which is first conditioned by said first circuit board, and also for
conditioning video and audio signals received by said transceiver/amplifier section from
the other party;

a microphone electrically communicating with said digital signal processor for
25 receiving sound and converting the sound to audio signals;

a speaker electrically communicating with said digital signal processor for
broadcasting audio signals;

a video view screen attached to said PDA, said video view screen for selectively
displaying images from said imaging device, and for selectively displaying video images
30 received by said transceiver/amplifier section;

a video switch communicating with said first circuit board and said digital signal
processor for switching video images to be viewed on said video view screen; and

a power supply mounted to said PDA for providing power thereto.

71. A device, as claimed in claim 70, wherein:
said pixels are CMOS pixels.

72. A device, as claimed in claim 70, wherein:
said transceiver radio element and said transceiver radio module communicate by
a bluetooth communications standard.

73. A device, as claimed in claim 70, wherein:
said transceiver radio module and said transceiver radio element communicate by
an IEEE 802.15.13 communications standard.

74. A PDA having capability to transmit and receive data in a
communications network, said PDA comprising:

an image sensor lying in a first plane, and an array of pixels for receiving images
thereon, said image sensor further including circuitry means electrically coupled to said
array of pixels for timing and control of said array of pixels, said circuitry means for
timing and control being placed remote from said array of pixels on a second plane, said
image sensor producing a pre-video signal;

a first circuit board electrically coupled with said image sensor and lying in a third
plane, said first circuit board including circuitry means for processing and converting said
pre-video signal to a desired video format;

a transceiver radio element communicating with said first circuit board to
wirelessly transmit the converted pre-video signal;

a camera module housing said image sensor, said first circuit board and said
transceiver radio element;

15 a transceiver/amplifier section electrically coupled to said transceiver radio module for amplifying and further transmitting said converted pre-video signal and for receiving and amplifying video and audio signals transmitted by another party;

 a digital signal processor electrically coupled to said transceiver radio module and said transceiver/amplifier section, said digital signal processor further conditioning said
20 converted pre-video signal which is first conditioned by said first circuit board, and also for conditioning video and audio signals received by said transceiver/amplifier section from the other party;

 a microphone electrically communicating with said digital signal processor for receiving sound and converting the sound to audio signals;

25 a speaker electrically communicating with said digital signal processor for broadcasting audio signals;

 a video view screen attached to said PDA, said video view screen for selectively displaying selectively displaying video images from said image device, and for selectively displaying video images received by said transceiver/amplifier section from the other
30 party; and

 a video switch communicating with said first circuit board and said digital signal processor for switching video images to be viewed on said video view screen; and a power supply mounted to said PDA for providing power thereto.

75. A device, as claimed in claim 74, wherein:
said pixels are CMOS pixels.

76. A device, as claimed in claim 74, wherein:
said transceiver radio element and said transceiver radio module communicate by a bluetooth communications standard.

77. A device, as claimed in claim 74, wherein:

said transceiver radio module and said transceiver radio element communicate by an IEEE 802.15.13 communications standard.

78. In a method for conducting video conferencing communications through a global communications network, the improvement comprising the steps of:

providing a camera module having an image sensor housed therein;

removing the camera module from connection with the PDA;

5 pointing the camera module at a targeted object and taking video images of the targeted object;

wirelessly transmitting the video images taken by image sensor to the PDA;

processing the video images transmitted by the camera module ; and

10 selectively viewing the video images on the PDA and selectively transmitting the video images to another party.

79. A method, as claimed in claim 78, wherein:

said image sensor includes a CMOS pixel array.

80. In a PDA having capability to transmit and receive data communications network, the improvement comprising:

a camera module housing an image sensor therein, said camera module for producing video images of a targeted object;

5 means for wirelessly interconnecting said camera module to said PDA, said means for wirelessly interconnecting enabling said camera module to be selectively displaced at a location remote from said PDA; and

10 a video view screen attached to said PDA for selectively viewing video images
 taken by said camera module, and for selectively viewing incoming video images
 received from the personal computer connected to the global communications network.

81. A device, as claimed in claim 80, wherein:

said PDA includes a housing, and an opening for receiving said camera module
 so as to place said camera module in a stored position.

82. In a PDA having a housing and a video view screen for viewing video
 images, the improvement comprising:

a camera module housing an image sensor therein, said camera module for
 producing video images of a targeted object; and

5 means for wirelessly interconnecting said camera module to said PDA, said
 means for wirelessly interconnecting enabling said camera module to be selectively
 displaced at a location remote from said PDA.

83. A device, as claimed in claim 82, wherein:

said PDA includes an opening in said housing for receiving said camera module
 so as to place said camera module in a stored position.

84. In a PDA, the improvement comprising:

a camera module housing an image sensor therein;

first circuitry means coupled to said image sensor for timing and control of said
 image sensor;

5 second circuitry means for processing images taken by said image sensor to
 create video signals of a desired video format; and

means for wirelessly interconnecting said camera module to a housing of said PDA, said means for wirelessly interconnecting enabling said camera module to be selectively displaced from said housing by the user for pointing the camera module at a targeted object without having to manipulating the PDA.

85. A device, as claimed in claim 84, wherein:

said PDA includes an opening in said housing for receiving said camera module so as to place said camera module in a stored position.

86. In a PDA having the capability to transmit data between a personal computer connected to a global communications network, the improvement comprising:

a camera module housing an image sensor therein;

a camera module battery housed within said camera module for providing power to said camera module;

a camera battery charge circuit housed within the PDA;

a PDA battery housed within the PDA for providing power to said camera battery charge circuit; and

wherein the camera module is received in the PDA so said camera module battery electrically communicates with said camera battery charge circuit to selectively charge said camera module battery.

87. A method of powering and recharging a camera module for use with a PDA, said method comprising the steps of:

providing a PDA housing a camera battery charge circuit therein;

5

activation of said camera module battery for powering said camera module; and

10